

Application No. 10/519,352

AMENDMENTS TO THE CLAIMS

A detailed listing of all claims that are, or were, in the present application, irrespective of whether the claim(s) remains under examination in the application are presented below. The claims are presented in ascending order and each includes one status identifier.

1. (Original) A medicament for the treatment or prevention of diseases due to infection by *Neisseria meningitidis*, characterized in that it comprises:

glycoconjugates or lipooligosaccharides (LOS) purified or included in outer membrane vesicles, blebs, lipid layers, liposomes and/or killed bacteria from commensal *Moraxella catarrhalis* with cross-reactive antigens to *Neisseria meningitidis* of the serogroup A, B, C, H, I, K, L, X, Y, Z, 29E or W135, or non-capsulated meningococcal strains, or antibodies against such glycoconjugates or lipooligosaccharides.

2. (Original) The medicament of claim 1, wherein the cross-reactive antigens to *Neisseria meningitidis* are oligosaccharides of LOS, which are cross-reactive with human blood group antigens.

3. (Original) A medicament for the treatment or prevention of diseases due to infection by *Neisseria meningitidis*, characterized in that it comprises:

glycoconjugates or lipooligosaccharides (LOS) purified or included in outer membrane vesicles, blebs, lipid layers, liposomes or killed bacteria from commensal *Neisseria lactamica* with cross-reactive antigens to *Neisseria Meningitidis* of the serogroup B, C, H, I, K, L, X, Y, Z, 29E or W135, or non-capsulated meningococcal strains, wherein the cross-reactive antigens to

Application No. 10/519,352

Neisseria meningitides are oligosaccharides of LOS, which are cross-reactive to human blood group antigens, or antibodies against such oligosaccharides of LOS.

4. (Currently Amended) The medicament of claim 1, characterized in that the glycoconjugates or lipooligosaccharides are chemically modified, conjugated or hydrolyzed; ~~preferably by mild acid hydrolysis.~~

5. (Currently Amended) The medicament of claim 1, ~~preferably for the treatment of acute meningitis or septicaemia,~~ characterized in that the antibodies are monoclonal or polyclonal, and that they are obtain from commensal or meningococcal species from:

virus immortalized human lymphocytes secreting the glycoconjugate neutralizing, specific or cross-reactive antibodies,

from human lymphocytes secreting the neutralizing antibodies fused with a human hybridoma cell line,

from immunized animals, ~~preferably mice, rats, rabbits or pigs~~ producing polyclonal serum against such antibodies, or

from immunized animals, ~~preferably mice, rats, rabbits or pigs,~~ after fusion of the immunized animal mouse lymphocytes with a human or animal hybridoma cell line.

6. (Original) The medicament of claim 1, characterized in that it is a vaccine.

7. (Original) The medicament of claim 1, characterized in that it is provided as a nasal/oral spray, as a liquid for injection, as an orally applied capsule or tablet or in combination with an adjuvant.

Application No. 10/519,352

8. (Currently Amended) The medicament of claim 1 for the treatment of acute meningitis or septicemia, and/or passive immunisation or protection of close contacts or susceptible individuals, characterized in that the antibodies are monoclonal or polyclonal, and that they are obtained from commensal or meningococcal species, or native or toxin-conjugated, or adjuvant supplemented human blood group antigens (~~sialylated and non-sialylated forms of P, pK, paragloboside, H, Lewis~~):

from virus immortalized human lymphocytes secreting the glycoconjugate neutralizing, specific or cross-reactive antibodies,

isolated from human serum or plasma, or human breast milk, or human secretions (~~i.e. saliva~~),

from human lymphocytes secreting the neutralizing antibodies,

from human lymphocytes secreting the neutralizing antibodies fused with a human or animal hybridoma cell line,

from immunized animals, ~~preferably mice, rats, rabbits, or pigs~~ producing polyclonal serum against such antigens, or

from immunized animals, ~~preferably mice, rats, rabbits, or pigs~~ after fusion of the animal lymphocytes with a human or animal hybridoma cell line.

9. (Original) The medicament of claim 1, characterized in that the antibodies are of the classes IgA₁, IgA₂, IgD, IgG₁, IgG₂, IgG₃, IgG₄, IgM, and/or IgE, that are secreted or membrane bound to human or animal cells, or to artificial membranes or liposomes.

Application No. 10/519,352

10. (Original) The medicament of claim 1 for passive immunisation, characterized that it is provided as a nasal, oral or mucosal spray or tincture, as a liquid for injection, as an orally applied capsule or tablet or in combination with sodium selenite or with an adjuvant.
11. (Original) The medicament for passive immunisation with antibodies of claim 1, characterized that it is applied in combination with or without sodium selenite, or that sodium selenite is used as an agent for the treatment or protection of meningococcal disease without the medicament of claim 4, or prior to the application of the medicament of claim 4, or parallel to the application of the medicament of claim 4, or after to the application of the medicament of claim 4.
12. (Original) A diagnostic to assess the susceptibility of patients for diseases due to *Neisseria meningitidis*, characterized in that it comprises glycoconjugates or lipooligosaccharides from commensal bacteria with cross-reactive antigens to *Neisseria lactamica* or *Moraxella catarrhalis* and/or antibodies against such glycoconjugates or lipooligosaccharides or oligosaccharides of LOS of claim 1.
13. (Currently Amended) The medicament of claim 3, characterized in that the glycoconjugates or lipooligosaccharides are chemically modified, conjugated or hydrolyzed, ~~preferably by mild acid hydrolysis.~~
14. (Currently Amended) The medicament of claim 3, preferably for the treatment of acute meningitis or septicaemia, characterized in that the antibodies are monoclonal or polyclonal, and that they are obtain from commensal or meningococcal species from:

Application No. 10/519,352

virus immortalized human lymphocytes secreting the glycoconjugate neutralizing, specific or cross-reactive antibodies,

from human lymphocytes secreting the neutralizing antibodies fused with a human hybridoma cell line,

from immunized animals, ~~preferably mice, rats, rabbits or pigs~~ producing polyclonal serum against such antibodies, or

from immunized animals, ~~preferably mice, rats, rabbits or pigs~~, after fusion of the mouse immunized animal lymphocytes with a human or animal hybridoma cell line.

15. (Currently Amended) The medicament of claim 3 ~~for the treatment of acute meningitis or septicaemia, or passive immunisation or protection of close contacts or susceptible individuals,~~ characterized in that the antibodies are monoclonal or polyclonal, and that they are obtained from commensal or meningococcal species, or native or toxin-conjugated, or adjuvant supplemented human blood group antigens (~~sialylated and non-sialylated forms of P, pK, paragloboside, Ii, Lewis~~):

from virus immortalized human lymphocytes secreting the glycoconjugate neutralizing, specific and/or cross-reactive antibodies,

isolated from human serum or plasma, or human breast milk, or human secretions (~~i.e. saliva~~),

from human lymphocytes secreting the neutralizing antibodies,

from human lymphocytes secreting the neutralizing antibodies fused with a human or animal hybridoma cell line,

from immunized animals, ~~preferably mice, rats, rabbits, or pigs~~ producing polyclonal serum against such antigens, or

Application No. 10/519,352

from immunized animals, ~~preferably mice, rats, rabbits, or pigs~~ after fusion of the animal lymphocytes with a human or animal hybridoma cell line.

16. (Original) The medicament of claim 3, characterized in that it is a vaccine.
17. (Original) The medicament of claim 3, characterized in that it is provided as a nasal/oral spray, as a liquid for injection, as an orally applied capsule or tablet or in combination with an adjuvant.
18. (Original) The medicament of claim 3, characterized in that the antibodies are of the classes IgA₁, IgA₂, IgD, IgG₁, IgG₂, IgG₃, IgG₄, IgM, and/or IgE, that are secreted or membrane bound to human or animal cells, or to artificial membranes or liposomes.
19. (Currently Amended) A method of treating a patient comprising providing a patient with ~~[[T]]~~the medicament of claim 3 for passive immunisation, characterized that it is provided as a nasal, oral or mucosal spray or tincture, as a liquid for injection, as an orally applied capsule or tablet or in combination with sodium selenite or with an adjuvant.

Please add new claims 20-22:

20. (New) A method of treating a patient comprising providing the medicament of claim 1 to a patient diagnosed with acute meningitis.

Application No. 10/519,352

21. (New) A method of treating a patient comprising providing the medicament of claim 1 to a patient diagnosed with septicaemia.

22. (New) The method of claim 8 wherein the adjuvant supplemented human blood group antigens are members of the group consisting of sialylated and non-sialylated forms of P, pK, paragloboside, Ii, Lewis, and combinations thereof.